

CLAIMS

What is claimed is:

1. One or more suppressor T cells capable of decreasing graft rejection of a solid organ by a recipient made by the process comprising:
 - 5 a) isolating peripheral blood mononuclear cells (PBMC) from a recipient and an organ donor;
 - b) irradiating T cell-depleted mononuclear cells from said organ donor PBMC; and
 - c) combining *ex vivo* said recipient PBMC with said donor irradiated T cell-depleted mononuclear cells and a regulatory composition comprising TGF- β to induce one or
10 more recipient suppressor T cells.
2. A population of suppressor T cells capable of decreasing graft rejection of a solid organ by a recipient made by the process comprising:
 - a) isolating peripheral blood mononuclear cells (PBMC) from a recipient and an organ donor;
 - 15 b) irradiating T cell-depleted mononuclear cells from said organ donor PBMC;
 - c) combining *ex vivo* said recipient PBMC with said donor irradiated T cell-depleted mononuclear cells and a regulatory composition comprising TGF- β to induce a PBMC population comprising one or more recipient suppressor T cells; and
 - d) wherein a recipient suppressor T cell population is produced by expanding said
20 recipient suppressor T cells.
3. The suppressor T cells according to Claim 1 or 2, wherein said regulatory composition further comprises cytokines selected from the group consisting of IL-2 and IL-15.
4. The suppressor T cells according to Claim 1 or 2, wherein said PBMC from said recipient are enriched for CD4⁺ T cells.
- 25 5. The suppressor T cells according to Claim 4, wherein said CD4⁺ cells are enriched for naïve CD4⁺ T cells.
6. The suppressor T cells according to Claim 1 or 2, wherein said PBMC from said recipient are enriched for CD8⁺ T cells.